USACE and GBRA's present agreement preserves the past

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Nature seems to always find a way to remind us that no matter how fast we can build something, nature can destroy it even quicker. In July 2002 with the help of an overflowing lake, nature demonstrated its destructive and creative powers all within a 48 hour period. While rushing waters devastated homes and businesses along a 20-mile stretch of Guadalupe River in Central Texas, nature unearthed history and left behind lessons in ecosystem building.

This ecosystem, better known to those in Comal County, Texas as the Canyon Lake Gorge, like all ecosystems is a web of living and nonliving parts. Plants, animals, rocks, soil, air, water, sun, and people are all links in the Earth's web of life.

According to the Fish and Wildlife Service, ecosystems can be as small as a backyard pond or as large as the Earth. They could have been created when dinosaurs roamed or as recent as three years ago. Ecosystems and habitats are not just concepts for biologists; they are real places that are valued by people for recreational, aesthetic, and economic reasons.

Representatives from federal, state and local government, civic organizations and community activists gathered for a box lunch picnic atop a limestone shelf Nov. 29, 2005, just a few hundred feet away from the spillway that created this gorge. The group of more than 40 was there to celebrate the signing of a cooperative agreement between the U.S. Army Corps of Engineers and the

Guadalupe-Blanco River Authority to begin developing the Canyon Lake Gorge as an educational and natural resource.

“This is going to be about teamwork and partnering for the future of this gorge,” said Col. John Minahan, commander, Fort Worth District. “In a team effort, many different agencies came together to react to the flood and recover from the devastation so it is appropriate that it be preserved in a team spirit.”

According to Timothy Horn, Canyon Lake manager, even with floodwaters going over the spillway, Canyon Lake Dam still prevented an estimated $38.6 million in damages downstream during this one event.

In the wake of the tremendous loss from the heavy rains which filled the Guadalupe River watershed, allowing the lake to flow over its uncontrolled spillway, the one-mile gorge was carved into the limestone. Roaring down the spillway at a peak flow of just under 70,000 cubic feet of water per second, the water carved a gorge hundreds of yards wide and 50 or more feet deep back one mile to the Guadalupe River channel.

According to Park Ranger Lionel Castillo, when the water receded, a series of pools were left behind with several springs and waterfalls bubbling from the rocks. Living in the pools of water are carp which swim through spring waters that flow through the gorge and other wildlife which now make the gorge home.

At the moment, the Corps has taken geologists and educational groups through the gorge on guided tours focusing on learning from what the flood not only left behind, but what it uncovered as well. The flood ripped through the

limestone exposing different layers of rock as old as 100 million years that revealed fossils and a set of dinosaur tracks.

“Early on after the recovery efforts had been well underway thoughts began to surface on what to do with the gorge,” said W.E. “Bill” West, Jr., general manager, Guadalupe Blanco River Authority. “We wanted to find the silver lining in the dark cloud of the flood.”

Castillo said the goal is to figure out a way to let people see the beauty of the gorge and learn about the ecosystem created by the flood without causing harm to one of nature’s newest creations.

After their lunch, it was time for the group to explore the gorge themselves as they were divided into two groups and escorted through the area by Dr. Carter Keairns, Texas State University, geologist and Dr. Bill Ward, a retired geologist on the Citizens Board and the Gorge Scientific Committee.

During the tour, Keairns pointed out fossils, dinosaur tracks and even a fault line that was exposed by the raging water. “The three-toed prints were probably made by a theropod dinosaur,” said Keairns. “The theropod, walking on hind legs with a stride of about nine feet, was perhaps 30 feet in length. These tracks are similar to the ones found in Glen Rose, Texas, which shows that there was a dinosaur presence in the state.”

As the tour drew to a close, Comal County Judge Danny Scheel remembered standing on the spillway when the water was just feet below the crest, with Corps members wondering how bad the damage would be. Now, three years later, he

stands a few hundred feet from that spot and can see a bright attraction for his county.

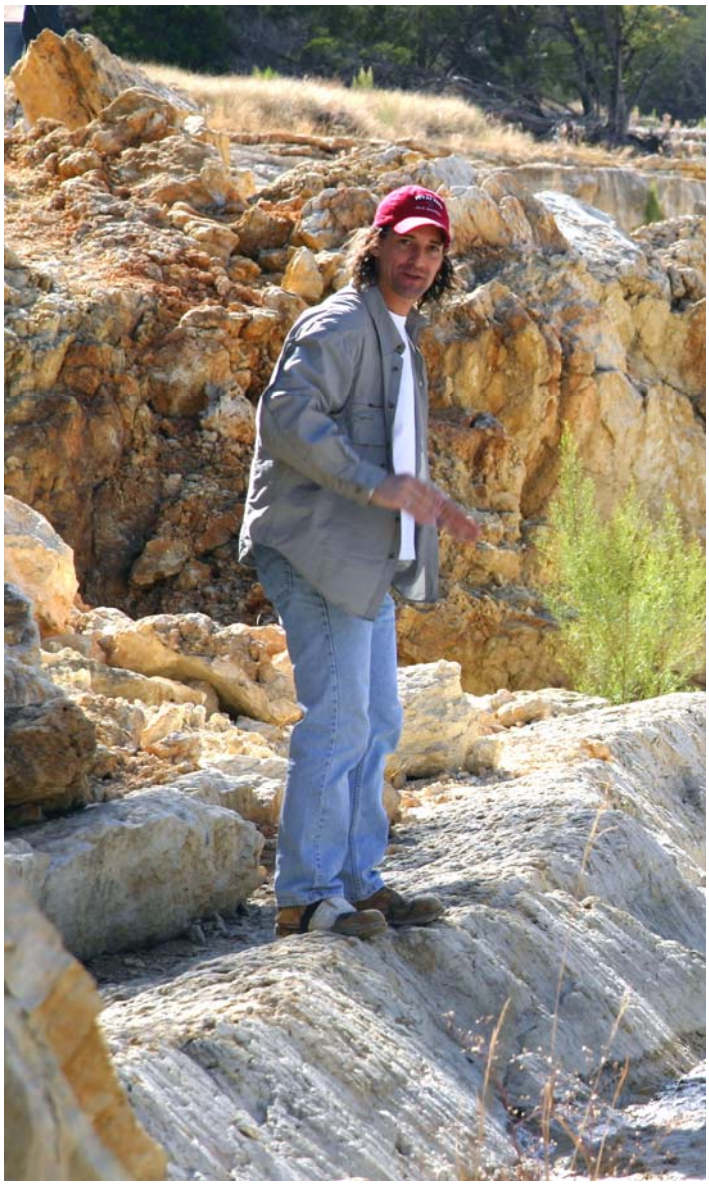
“If it weren’t for the leadership and the positive attitude of the Corps of Engineers and all of those involved, things could have been much worse. It’s fitting that we celebrate this agreement here and continue our partnership to preserve and share this resource with everyone,” said Scheel.

Photos

Canyon Lake Park Rangers Brett Delk, Wade Reinhardt and Lionel Castillo stand ready to help escort visitors through the Canyon Lake Gorge, Nov. 29, 2005.

Col. John Minahan, commander, Fort Worth District, closely examines the flow on an underground spring along the Canyon Lake Gorge, Nov. 29, 2005 during a tour of the gorge.

Former United States Senator Bob Krueger, a member of a tour group visiting the Canyon Lake Gorge, addressed representatives from federal, state and local government, civic organizations and community activists about the importance of preserving the gorge through teamwork.



Dr. Carter Keairns, geologist, University of Texas, stands on a fault line that was revealed by the waters that rushed from Canyon Lake Dam's uncontrolled spillway.

Roaring down the spillway at a peak flow of almost 70,000 cubic feet of water per second, the water carved a gorge hundreds of yards wide and 50 feet deep one mile back to the Guadalupe River.